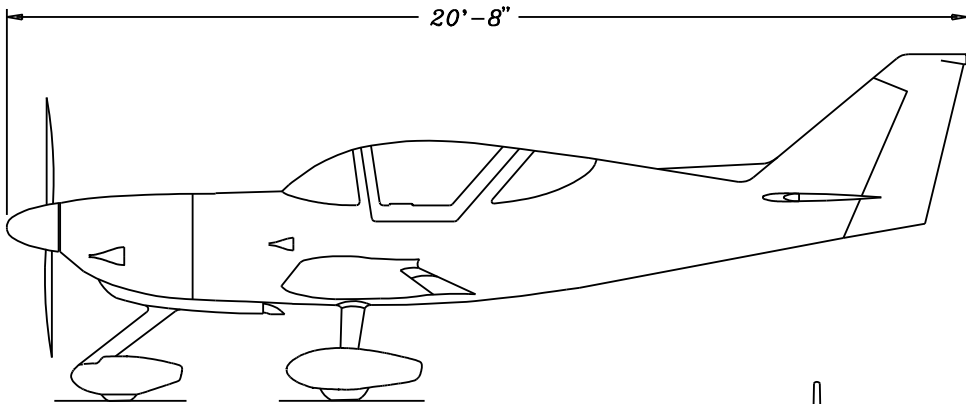
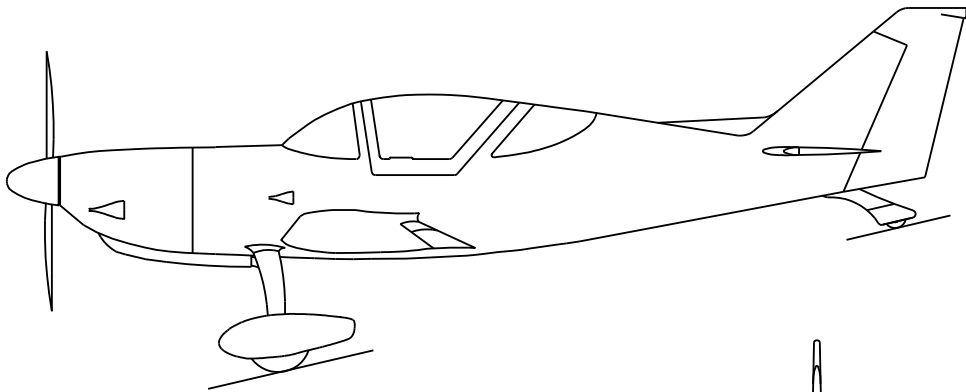
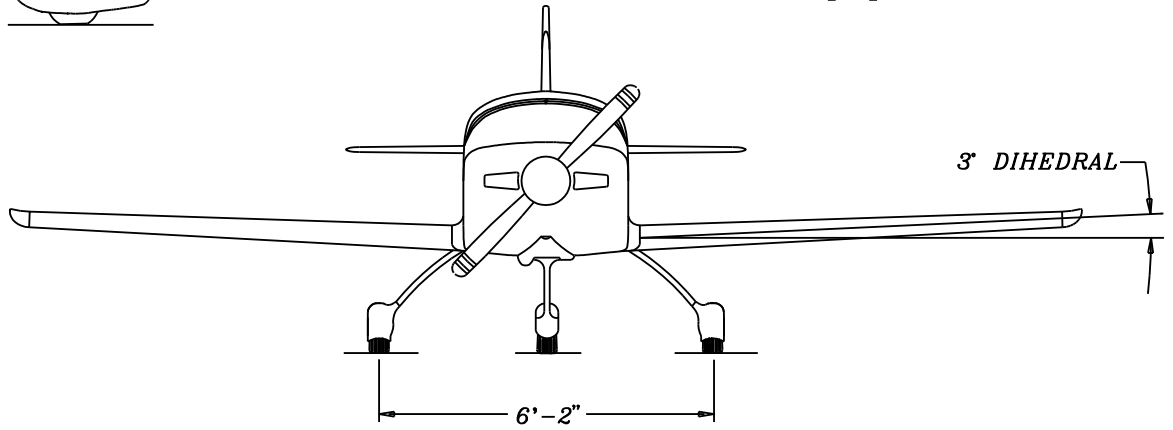


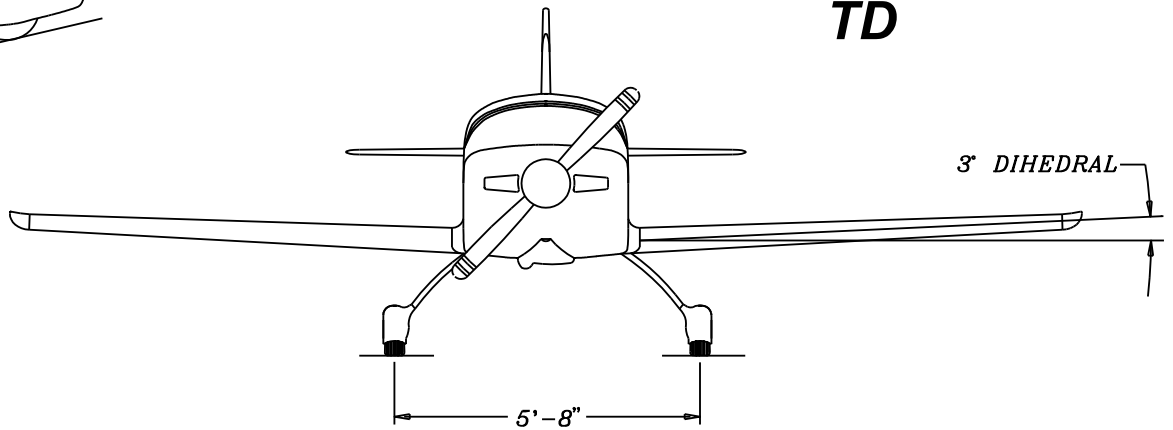
❖ **GLASAIR SUPER II . . . VERSATILITY WITHOUT COMPROMISE**



FT



TD



Simply stated, the Glasair Super II provides more “bang for the buck” than any other kit aircraft you can buy! With awesome cruise speed, prodigious cross-country range, trainer-like slow-speed handling and thrilling aerobatic capability (all on an economical four cylinders), it’s tough to think of anything the Super II can’t do. Whether your idea of flying fun is shooting a difficult approach in hard IMC or perfecting your barrel roll on a sunny Sunday afternoon, the Super II will accommodate you in style. And with three choices of landing gear configuration, you can build the Super II that best suits your piloting style and your bank account. The following pages detail the differences among the three models of Super II, as well as some of the features that make it such a versatile choice for your kit-built project.

LANDING GEAR CONFIGURATIONS

RG — Retractable Tricycle Gear

The RG is our top-of-the-line Super II model for pilots who demand the performance edge over the rest (or who just can’t bear to have the gear hanging out!). The RG utilizes strong, oleo-pneumatic landing gear struts designed, like our Glasair III gear, to be as maintenance-free as possible. The struts are professionally manufactured using automated welding techniques and many computer numerical controlled (CNC) machined parts. Also like the III, the Super II RG uses an electro-hydraulic

hydraulic componentry is included (e.g., gear switch, wiring, position lights, microswitches, PC relay board, hydraulic pump, manifolds, pressure tubing, fittings, etc.) Gear doors are also included for all landing gear.

Take-offs, landings and ground operations are all a breeze with the nice, wide stance of the no-bounce oleo gear. The gear cycles in about eight seconds, and gear extension has minimal effect on pitch trim. The extra performance and sleek lines of the Glasair Super II RG make it a very popular choice among our customers.

FT — Fixed Tricycle Gear

The Glasair Super II FT is an outstanding choice for pilots who want honest, docile, trainer-like slow flight and landing characteristics but a cruise speed more than twice that of the typical trainer!

The FT combines the easy ground handling of tricycle gear with the operating and building simplicity of a fixed-gear design. The FT features all the

pump for retraction, but a pressure porting valve is used to extend the gear in the event of electrical or pump failure. An emergency extension hand-pump system is available as an option.

The gear package is as complete as we could possibly make it: all electrical and

great taxi visibility and excellent ground handling characteristics of the Super II RG without the hassle of having to remember to put the gear down. Simple but extraordinarily strong fiberglass main gear legs are employed, along with full-sized 5.00 x 5 tires. The

sturdy nose gear installation utilizes a rubber shock-mounted, heat-treated steel tube strut, with a free-castering nose wheel. A simple but very effective shimmy damper system is built into the nose wheel fork. Due to its simplicity, the FT is as easy to build as it is to fly.

With standard faired gear legs and streamlined wheel pants, the performance of the Super II FT is incredible, sacrificing less than 10 knots in top speed to its retractable-gear sibling, the Super II RG. The FT is by far our most popular fixed-gear model.

TD — Taildragger

The Glasair Super II TD is the direct descendant of the very first Glasair to take wing from an 1,800’ gravel strip more than 15 years ago. Now, as then, the TD satisfies purists who feel “real airplanes” have tailwheels—and who are we to argue?!

The Super II TD utilizes essentially the same massive fiberglass main gear legs as the FT but matches them with a beautifully-faired, full-swivel locking tailwheel. The TD places more demands on the pilot than any of our other models, as it is (like most high-performance taildraggers) blind over the nose in the tail-down stance. Nevertheless, the TD’s racy good looks, outstanding performance and simple construction make it an attractive choice for experienced taildragger pilots and enthusiasts of aviation’s Golden Age!

ENGINE CHOICES

All Glasair Super II models are designed for the installation of certified Lycoming four-cylinder aircraft engines of either 320 or 360 cu. in. displacement. Within this category, however, there are innumerable choices among engines of different model, horsepower, propeller requirement, etc.—both new and used. The following information should help you choose the best engine and propeller combination for your particular needs. The engine model you choose will determine the type of engine mount and exhaust system required for your airplane.

O-320 Series Carbureted Engines

A carbureted Lycoming O-320 engine can be installed on any of the three Glasair Super II models. This engine is available in 150 hp, low-compression and 160 hp, high-compression versions. The 160 hp variant is recommended because the higher compression ratio makes the engine inherently more fuel efficient than the 150 hp. Most 150 hp O-320s can be upgraded to 160 hp by installing a set of high-compression pistons with heavier wrist pins. When looking for an engine, remember that the 'B' and 'D' series O-320s are 160 hp, while the 'A,' 'C' and 'E' series are 150 hp. The only O-320 engines that **cannot** be used on the Glasair Super II are the 'H' series engines, the crankcases of which feature an integral accessory case.

An important factor to consider when selecting a Lycoming O-320 engine is the location of the carburetor on the oil sump. Early-model O-320s ('A,' 'B' and 'C' series) have updraft carburetors mounted toward the **aft** end on the underside of the sump. This carburetor location is not suitable for the Super II because it interferes with the nose gear on the RG and FT and with the exhaust system on all three models. These early-model O-320s can still be adapted to use on the Super II, but the oil sump and intake tubes must be replaced with those from a later-model O-320-D or -E.

O-360 Series Carbureted Engines

With certain minor modifications, carbureted, 180 hp Lycoming O-360 engines are suitable for use in the Super II FT and TD models but **not** in the RG. This is because the carburetor on the O-360 extends down about one inch lower than the O-320 carburetor and interferes with the retractable nose gear. Also, because of the lower carburetor, the lower cowling half on the Super II FT and TD has to be slightly enlarged by the builder to provide clearance for the carb air inlet box. Several Glasair builders have made these modifications quite successfully.

IO-360 Series Fuel-Injected Engines

Fuel-injected 180 hp Lycoming IO-360 engines are also suitable for installation in all models of the Super II, and in fact, this series has increasingly become the engine of choice among Super II builders. Many models in this series can be installed in the Super II without builder modification; other models require some amount of modification to the engine.

Any 180 hp IO-360 with an **aft-mounted injector servo** can be installed in the Super II with little or no modification. Models with servos in other locations cannot be accommodated in the standard cowling; in order to utilize these engines in the Super II, the builder must either

swap the oil sump for one with the servo mount aft or design a custom air induction system and modify the cowling to match. These tasks are certainly not beyond the abilities of many builders.

IO-360s of the 'A' and 'C' series are 200 hp engines, and **some** of these engines can be used in **some** Super IIs. IO-360-As feature forward-mounted injector servos, while -Cs have aft-mounted ones. **Neither** series of 200 hp IO-360 is suitable for use in the Super II FT, because they both interfere with the nose gear truss. However, with a slight builder-modification to the cowling, 'C' series engines with aft-mounted servos **can** be used in the RG and TD. The modification, which consists of fabricating two small teardrop-shaped blisters around the forward-most pair of cylinders, is necessitated by the slightly greater width of the 200 hp model. IO-360-A engines can also be used in the RG and TD models, but only if the oil sump and intake tubes are swapped for ones with an aft-mounted injector servo.

Note: *There is also an injected, 160 hp engine—the IO-320-B1A—that can be used in the Super II. This engine was used in the Piper Twin Comanche, and thus has some limited availability on the used market.*

Specific Engine Model Recommendations

As the preceding paragraphs have shown, there is a wide range of suitable engine options for the Super II. This breadth of choices increases the versatility of the Super II design, but we recognize that it may also threaten some potential builders with information overload! For this reason, we offer the following specific recommendations:

For builders planning on using a fixed-pitch propeller (see section on propeller selection below), we recommend the O-320-E2D. This engine—probably the most widely available model on the used market—is a 150 hp, carbureted engine

but is upgradable to 160 hp when overhauled.

A good used engine for those installing a constant-speed propeller is the O-320-E2A. This is also a 150 hp carbureted engine that is upgradable to 160 hp.

For those who desire a factory-new carbureted engine, the O-320-D1F is the best choice. This is a 160 hp engine that can be fitted with either a fixed-pitch or constant-speed propeller. This engine comes with a prop governor mounting pad on the front of the crankcase; other models with the governor pad on the accessory case are subject to some bothersome ADs that the D1F is not. O-320-D1Fs are available direct from New Glasair LLC at an attractive OEM price.

For a 180 hp, fuel-injected engine, we recommend the IO-360-B1E or -E1A; the former is available at OEM prices from Glasair Aviation LLC. Either model can be fitted with a constant-speed propeller.

Propellers

Either fixed-pitch or constant-speed propellers can be used on the Super II. However, we recommend a constant-speed prop to allow you to take the best advantage of the Super II's outstanding performance.

Any fixed-pitch propeller is a compromise: either take-off and climb performance are sacrificed for higher cruise speed, or vice versa. Nevertheless, for operational simplicity, relatively low maintenance requirements and attractive price, many Super II builders do choose fixed-pitch props Glasair Aviation LLC recommends (and sells at OEM prices) a 70"-diameter Sensenich metal prop designed specifically for the Glasair.

Constant-speed propellers allow the pilot essentially to "shift gears." Full power is thus available for take-off and climb, but RPMs can be reduced at cruise to

maximize range and fuel economy. Glasair Aviation LLC offers OEM pricing on a range of Hartzell constant-speed props optimized for various Super II applications.

Constant-speed props are available with either compact or extended hubs. Compact-hub props are available with or without aerobatic counterweights. These counterweights cause the blades to go to coarse pitch rather than fine pitch in the event of loss of oil pressure—an essential safety feature for serious aerobatics.

The extended-hub constant-speed propellers for the 150/160 hp and 180 hp engines have an integral extension built into the hub that allows use of the standard Super II cowling. Compact-hub constant-speed props, with or without aerobatic counterweights, require a special, shorter engine cowling and modified spinner, both of which are available options. Only compact-hub propellers must be used with 200 hp IO-360 engines.

Note: *"Aerobatics" means different things to different people. The occasional loop and roll can be performed perfectly safely in Super IIs equipped with extended-hub props. However, "serious" aerobatics, especially involving negative-G maneuvers, should only be flown with the compact-hub, counterweighted aerobatic prop or a fixed-pitch propeller.*

All constant-speed propellers require a governor. Different governors are required for different engine and prop combinations Glasair Aviation LLC sells a range of governors from Woodward Governor and Hartzell at OEM prices.

Not all engines will accommodate a constant-speed propeller. The engine must have a machined governor mounting pad and the crankshaft must be drilled to permit oil flow from the governor to the prop. To use a constant-speed prop on some engines may require replacing the accessory case.

Note: *It is possible but not recommended to use a fixed-pitch, wooden propeller on*

the Super II. Wooden props are attractively priced but generally provide inferior performance and require much more diligent maintenance.

Questions?

Engine and prop selection can be bewildering given the huge number of possible combinations and the sometimes arcane differences among them. When you're trying to balance what you want and what you can afford, the choices just become tougher.

Hopefully, this booklet has shed some light, but we stand ready at any time to answer your questions on engines, props or any other subject related to your decision to purchase, build and fly an exciting Glasair Super II. Don't hesitate to give us a call!

As the preceding text has no doubt made clear, you have a lot of choices to make when you purchase a Glasair III or Super II kit. This section of the booklet is intended to help you identify some of the main choices you'll need to consider—the so-called “kit options.” Kit options are major airframe or powerplant components that must be selected at or near the beginning of the construction process.

GLASAIR KIT OPTIONS

Engine Mounts (Super II only)

Lycoming O-320-A, -B and -C, and O-360-C and -D engines all use “conical” mounts. These use a pair of cone-shaped rubber bushings at each of the four corners of the crankcase. The bushings bolt to mounting points on the engine mount itself, all four of which are located in the same plane. Hence, the conical mount is also known as the “flat” mount.

All other O- and IO-320 and -360 engines use a “Dynafoal” mount in which the mounting points are angled slightly so that the mounting bolts point to a common focal point near the center of gravity of the engine. Because of this feature, and also because larger diameter rubber bushings are used, the Dynafoal mounting system transmits less engine vibration into the airframe than does the conical mount.

The Dynafoal mount is available in two configurations, Type I and Type II. Type I mounts, which have an included angle of 30° between the mounting bolts, are most common and are used on the popular 160 hp O-320-D1A and the 180 hp IO-360-B1E, among many other engines. Type II mounts, with an included angle of 18°, are used on some fuel-injected models (such as the IO-320-B and -360-E1A).

Since it is the most popular mount, a Dynafoal Type I mount is included as a standard part of the Super II kit. An additional charge is made for other mount styles, reflecting the costs of producing these mounts in small volumes. If you have selected an engine but are still unsure about which engine mount you need, please call our Builder Support Department; we'll be happy to assist you.

Note: *The mount for the 300 hp IO-540 is standard in all Glasair III kits. No other options are available.*

Exhaust Systems (Super II only)

Custom-welded stainless steel exhaust systems are available as options. These systems, which include an integral cabin heat muff, a carb heat muff (on the carbureted models) and all installation hardware, are somewhat lighter and will last at least three times longer than mild steel systems.

We offer exhaust systems to fit carbureted or injected 150/160 hp engines, carbureted or injected 180 hp engines, and injected 200 hp engines. Our O-320 exhausts fit only ‘D’ and ‘E’ series engines with updraft carburetors mounted toward the front of the underside of the oil sump. O-320-A, -B, and -C models can accommodate our exhaust system if the oil sump and intake tubes are exchanged with those from a -D or an -E model.

Exhaust systems for carbureted, 180 hp O-360s are made to fit the wider spacing of the exhaust ports.

The exhaust systems for injected engines are designed for engines with injectors mounted on the aft end of the sump. On these systems, the exhaust pipes pass through the area under the sump normally occupied by the updraft carb.

Spinner Assemblies

A spinner assembly is included in all Glasair kits. As detailed above, the spinner design varies slightly with different propellers; choose the one that matches your prop. However, there is no extra charge for **any** of the spinner options.

Cowlings (Super II only)

As detailed in the propeller selection section above, a special, short cowling is required for compact-hub propeller installations. We refer to this cowling as our “aerobatic” cowling, although it must also be used for non-counterweighted, compact-hub props on 200 hp IO-360s. Either this cowling or the standard cowling for extended-hub props can be selected at no extra charge.

Note: *Only one cowling is available for the Glasair III, and it is standard in all kits.*

Brakes

All Glasair kits come with rudder controls for both seats but brakes and pedals for the pilot’s side only. For an additional charge you can select a dual brake option, which includes custom cast aluminum Glasair rudder pedals, Cleveland master cylinders and all necessary brake lines, fittings and installation hardware for both sides.

Wingtip Extensions

As noted above, the extended wingtips can easily be added to any Glasair model at any time. However, if you wish to purchase the extended wingtip option, you need to decide whether to get them with or without the capability of carrying auxiliary fuel. The price of the “wet” tips is somewhat higher than that of the standard extensions.

Future Vision Instrument Panel

All Glasair kits include a sheet-aluminum blank and a full-sized template for constructing a flat instrument panel. A popular option at an additional charge is the sculpted composite Future Vision panel. This panel features five angled facets that allow the pilot to view the entire panel without the bothersome glare and parallax problems associated with flat panels. The option kit includes the pre-molded fiberglass panel, aluminum panel inserts, non-magnetic stainless steel instrument-mounting cap screws and all installation hardware and instructions.

Retractable Gear Electrical Systems (III only)

The standard Glasair III kit features a 14-volt landing gear electrical system, as described in the Glasair III section above. For an additional charge, components for a 28-volt system can be substituted.

Before selecting this option, be sure to check all engine accessories, instruments and avionics you wish to use for 28-volt system compatibility.

Note: *Because 28-volt systems are not as common on airplanes with fewer than six cylinders, the Super II kits all come with 14-volt electrical system components. No other options are available.*

Electric Flaps

A mechanical flap-actuation system is standard equipment in all Glasair kits. Electric actuation is available at an additional charge for any Glasair model with either the standard or the optional slotted flaps. However, the slotted flaps can **only** be actuated electrically.

Slotted Flaps

As discussed above, the optional slotted flaps reduce stall and approach speeds, improve over-the-nose visibility and decrease take-off and landing rolls in all Glasair models.

Note: *Due to the extremely high performance of the Glasair Super II RG and III, we **strongly recommend** the installation of slotted flaps in these aircraft.*

The Glasair Super II and III kits are some of the most comprehensive in the industry. In addition to all the major components of the airframe from the firewall to the tailcone, the kits include **every piece of hardware necessary to build the airframe**—every nut, every bolt, every rivet! Just how many parts are we talking about here? On the following pages are sample parts lists for Glasair III and Super II FT kits separated into their “SYSTEM 4” packages. This popular option allows you to purchase your Glasair kit in four logical, pay-as-you-build installments. Of course, you can also choose to receive your entire kit in one big crate if you prefer. (How big is the crate? See the box in the lower right-hand corner of this page!) These examples have been included to give you an idea of the completeness of the kits and the type of parts and hardware provided. The Glasair Super II TD list would be very comparable to the FT example, while the Super II RG list would be very comparable to the Glasair III example.

Note: *The lists that follow are examples only. The official kit parts lists are subject to change without notice with revisions and additions to the kits. For this reason, specific quantities of supplied hardware, raw materials and miscellaneous kit items are intentionally omitted from these sample lists. All fasteners (nuts, bolts, washers, rivets, screws, etc.) are also omitted. Finally, for space considerations, raw materials and fabrication supplies are listed only for the first of the Glasair III SYSTEM 4 kits. In actuality, each SYSTEM 4 kit for all Glasair models comes with a selection of such materials appropriate to that kit.*

**GLASAIR III — SYSTEM 4
KIT #1**

This kit contains the fuselage, engine mount, firewall, horizontal stabilizer, elevators and rudder. Since this is the first kit, the complete set of instruction manuals and associated templates are also included.

**Raw Materials and
Fabrication Supplies**

Aluminum Angle Stock
(8 sizes)
Aluminum Sheet
(5 thicknesses)
Aluminum Tubing (6 sizes)
Bi-Directional Fiberglass Cloth
Birch Plywood
Cabosil
CoNap Promoter

DMA Promoter
Fiberfrax Duraboard
Fire Barrier Caulk
Interam Fire Barrier
Lead Sheet
MEKP Catalyst
Milled Fiber
Phenolic Block
Polyethylene Sheet
Q-Cell
Rohacell Foam
Stainless Steel Sheet
(4 thicknesses)

Steel Sheet (2 thicknesses)
Tenite Butyrate Tubing
Unidirectional Fiberglass Cloth
Urethane Foam (2 densities,
4 thicknesses)
Vinyl Ester Resin

Fiberglass Parts

Belly Panel
Belly Sections, Fwd & Aft
Cowling Halves, Up & Lwr
Dorsal Fin

Elevator Panels, Upr & Lwr
 Elevator Root Rib
 Elevator Shearweb
 Fuel Sump
 Fuselage Halves, L & R
 Horizontal Stabilizer Panels,
 Upr & Lwr
 Horizontal Stabilizer 'A' Ribs
 Horizontal Stabilizer 'B' Ribs
 Horizontal Stabilizer 'C' Ribs
 Horizontal Stabilizer 'D' Ribs
 Horizontal Stabilizer Shearweb
 Horizontal Tips
 Nose Wheel Gear Box
 Rudder Halves, L & R
 Rudder Shearweb Extension
 Wing Root Fairings, L & R

Metal Parts

Aft Fuselage Tie-Down Plate
 Center Support Bracket
 Elevator Actuator Arm
 Elevator Hinge Bracket
 Elevator Torque Tubes
 Elevator Trim Attach Plate
 Engine Mount
 Engine Mount Spacer
 Eye Bolts
 Fuel Cap Assembly

Hinge Jig Angles
 Horizontal Hinge Bracket
 Master Cylinder Linkage Arms
 Master Cylinder Push Rods
 Master Cylinders
 Rudder Actuator Fitting
 Rudder Actuator Linkage
 Rudder Bellcrank Halves,
 Upr & Lwr
 Rudder Bellcrank Spacers
 Rudder Cable Actuator Arm
 Rudder Pedal Arm
 Rudder Pedal Sleeves
 Rudder Pedal Weldments,
 L & R
 Rudder Pedals, L & R

Miscellaneous Parts and Hardware

Aeroquip Hose
 Aluminum Spacers
 Bellcrank Bearing
 Cable Eyes
 Cable Shackles
 Clevis Pins
 Couplings
 End Pivot Bushings
 Eyebolt
 Fuel Drain Valve
 Fuel Screen
 Hinge Bracket Bushings
 NicoPress Sleeves
 90° Elbows
 Nipples
 Nut Couplings
 Nyliners
 Piano Hinge
 Pulleys
 Quarter Windows
 Rod End Bearings
 Rubber Hose
 Rudder Control Springs
 Sight Gauge Fittings
 Sleeves
 Stainless Steel Cable
 Stainless Steel Hose
 Clamps
 Threaded Drain Insert

More than 1,200 additional fasteners and hardware items not listed.

GLASAIR III — SYSTEM 4 KIT #2

This kit includes the complete wing, ailerons and flaps, aileron and flap control systems and wing fuel system.

Fiberglass Parts

Aileron/Flap Panels,
 Upr & Lwr, L & R
 Lower Wing Panel and Spar
 Assembly
 Main Gear Boxes, L & R
 Seat Pans, L & R
 Upper Wing Panels, L & R
 Wingtips, Upr & Lwr, L & R

Metal Parts

Aileron Actuator Fittings
 Aileron Actuator Linkage
 Aileron Bellcrank Halves,
 Upr & Lwr
 Aileron Counterweights, L & R
 Beaded Vent Valve Tubes
 Control Stick Sleeve
 Control Stick Swivel Tubes
 Control Sticks
 Control Stick Yokes
 Flap Actuator Linkage
 Flap Hinges
 Flapper Valves
 Fuel Cap Assemblies

Fuel Gauge Housing
 Fuel Gauge Mounting Plate
 Fuel Pickup Tube
 Fuel Selector Shaft
 Fuel Vent Float Valve Plugs
 Fuel Vent Float Valve Sub-
 Plates
 Fuel Vent Float Valves
 Inspection Cover Plates
 Main Spar Attach Fittings
 Spiral-Action Fuel Gauge
 Three-Way Fuel Selector Valve
 Wing Tie-Down Plates, L & R

Miscellaneous Parts and Hardware

Bellcrank Bearings
 Control Stick Yoke Bushings
 Eyebolts
 Fuel Drain Valve
 Fuel Gauge Gasket
 Fuel Screen
 Nipples
 Nut Couplings
 Nylon Loop Clamps
 'O' Rings
 Rod End Bearings
 Rod End Inserts
 Sleeves
 Stainless Steel Hose Clamps
 Steel Bushing
 Tees
 Teflon Bushings
 Threaded Drain Insert
 Unions
 Wingtip Nav Light Lenses, Red
 and Green

CRATE DIMENSIONS AND WEIGHTS

	Length	Width	Height	Weight
Glasair III Full Kit	24 ft.	46 in.	53 in.	1,600 lbs.
Super II RG Full Kit	24 ft.	46 in.	53 in.	1,500 lbs.
Super II FT Full Kit	24 ft.	46 in.	53 in.	1,400 lbs.
Super II TD Full Kit	24 ft.	46 in.	53 in.	1,400 lbs.
Glasair III Kit #1	16 ft.	48 in.	53 in.	750 lbs.
Super II RG Kit #1	16 ft.	48 in.	53 in.	700 lbs.
Super II RG & III Kit #2	24 ft.	22 in.	53 in.	700 lbs.
Super II RG & III Kit #3	40 in.	40 in.	24 in.	150 lbs.
Super II RG & III Kit #4	10 ft.	26 in.	20 in.	150 lbs.
Super II FT & TD Kit #1	9 ft.	30 in.	16 in.	125 lbs.
Super II FT & TD Kit #2	24 ft.	22 in.	53 in.	700 lbs.
Super II FT & TD Kit #3	16 ft.	48 in.	53 in.	700 lbs.
Super II FT & TD Kit #4	6 ft.	38 in.	40 in.	150 lbs.

Note: All dimensions and weights are approximate.

❖ **KIT OPTIONS**
❖ **KIT CONTENTS**

More than 700 additional

fasteners and hardware items not listed.

GLASAIR III — SYSTEM 4 KIT #3

This kit includes all the retractable landing gear components, such as the main and nose gear struts, hydraulic system, wheels and brakes, gear doors, etc.

Fiberglass Parts

Center Gear Doors, L & R
Main Gear Door Halves,
Upr & Lwr, L & R
Main Gear Strut Doors, L & R

Metal Parts

Axle Back-Up Rings
Nose Wheel Tire, 11.4 x 5,
8-ply
Nose Wheel Tube, 11.4 x 5
Nut Couplings
Nylon Loop Clamps
Piano Hinge
Plugs
Rod End Bearings
Rod End Clevises
Rod End Reinforcement Barrel
Roll Pins
Self-Aligning Bearings
Side Brace Stud Bushing
Shur-Lok Fasteners
Sleeve Bearings
Sleeves
Snap Rings
Steel Bushings
Tee
Unions
Valve Extension

More than 600 additional fasteners and hardware items not listed.

Axle Spacer Plates
Brake Reservoir
Downlock Assemblies
Downlock Bellcrank Bracket
Downlock Bracket Pin
Actuators
Downlock Linkages, L & R
Drag Brace
Drag Brace Bracket
Drag Links, L & R
Hydraulic Manifold
Main Gear Axles
Main Gear Bearing Housings
Main Gear Emergency Actuator
Assembly
Main Gear Hydraulic Actuators,
L & R
Main Gear Struts, L & R
Main Gear Uplock Hooks
Main Wheels and Brakes
Nose Gear Axle
Nose Gear Axle Plug
Nose Gear Emergency Actuator
Assembly
Nose Gear Hydraulic Actuator

GLASAIR III — SYSTEM 4 KIT #4

The final kit includes everything needed for final assembly of the airframe: the retractable gear electrical system, cowling, canopy and windshield installation, nose gear doors, exhaust, fuselage fuel system, etc.

Fiberglass Parts

Cabin Air Vent Boxes
Cabin Air Vent NACA Scoops
Canopy Frames, L & R
Canopy Latch Covers, L & R
Center Console
Cowl Flaps, L & R
Fuel Boost Pump Bracket
Induction Housing
Nose Gear Doors, Fwd, L & R
Oil Access Door

Metal Parts

Nose Gear Strut
Nose Gear Trunnion Pin
Nose Gear Uplock Actuator
Assembly
Nose Gear Uplock Hook
Nose Gear Uplock Spring Tabs
Nose Gear Uplock Stud
Nose Wheel
Nose Wheel Axle Bushing
Nose Wheel Axle Hub
Nose Wheel Guide Strap
Side Brace Bellcranks, L & R
Side Brace Brackets,
Fwd & Aft, L & R
Side Braces, L & R
Strut Door Linkages
Uplock Arm Brackets,
Fwd & Aft, L & R
Uplock Linkage Rods
Uplock Linkage Yokes
Uplock Linkages, Fwd & Aft

Miscellaneous Parts and Hardware

Air Filter Retainer Flange
Canopy Hinge Inserts
Canopy Hinges, Fwd & Aft,
L & R
Canopy Latch Actuator Bars,
Fwd & Aft
Canopy Latch Extension
Handles, L & R
Canopy Latch Handle
Housings, L & R
Canopy Latch Internal Handle
Assemblies, L & R
Canopy Latch Internal Return
Spring Assemblies
Canopy Latch Internal Spring
Brackets
Canopy Latch Internal Spring
Clevises
Canopy Latch Pivot Housings
Canopy Locking Pin Inserts,
Fwd & Aft
Canopy Locking Pins
Cowl Flap Actuation Cables,
L & R
Cowl Flap Hinge Arms, L & R
Cowl Flap Quadrant
Cowl Flap Quadrant Arm
Cowl Flap Quadrant Handle

Aeroquip Hose
Aluminum Spacer
Axle Nuts
Breather Plug
Clevis Bolts
Clevis Pins
Couplings
Downlock Bracket Bushings
Downlock Bracket Pins
Downlock Springs
Eyebolts
45° Elbows
Hose Ends
Main Gear Uplock Springs
Main Wheel Tires, 5.00 x 5,
10-ply
Main Wheel Tubes, 5.00 x 5
90° Elbows
Nipples
Nose Gear Emergency Uplock
Release Spring
Nose Gear Over-Center Springs
Nose Gear Uplock Spring

Elevator Bellcrank Halves,
Upr & Lwr
Elevator Clevis
Elevator Trim Gear Box and
Drum Assembly
Elevator Trim Housing
Elevator Trim Wheel
Elevator Trim Wheel Shaft
Assembly
Elevator Trim Attach Plate
Hand Pump Assembly
Hydraulic Pump Four-Way
Valve
Induction Elbow
Induction Filter Retainer Ring
Induction Inlet Flange
Injector Support Tubes,
Upr & Lwr
Linkage Travel Stop Pad
Main Gear Emergency Spring
Tab
Nose Gear Actuator Linkage
Nose Gear Door Actuator Yoke
Nose Gear Door Attach
Brackets, L & R
Nose Gear Door Hinge
Assembly
Rear Wing Attach Fittings

Miscellaneous Parts and Hardware

Adapters
Adhesive Mounting Bases
Adjustable Flow Restrictor
Aeroduct Hose
Aeroquip Hose
Air Filter
Aluminum Spacers
Bellcrank Bearings
Bulkhead Tees
Butt Connectors
Cable Eyes
Cable Shackles
Canopies, L & R
Canopy Latch Knob
Canopy Seal
Canopy Springs
Check Valves
Circuit Breakers
Clevis Pins
Cross Fitting
Diode Board
Diodes
Double-Pole Light Test Switch
Dzus Fasteners
Elevator Trim Position Indicator Placard
Elevator Trim Springs
Emergency Gear Down Spring
Exhaust Spring
Eyeball Vents
Fire Sleeve
Flex Hose
45° Aeroquip Fitting
45° Elbows
Fuel Drain Valve
Fuel Filter
Fuel Filter Seal
Gas Spring Safety Clips
Gas Spring Stud Balls
Gas Springs
Heat Shrink Tubing
Hose Ends
Hydraulic Snubber
Hydraulic Valve Directional Placard
Induction Air Flex Coupling
Induction Elbow Gasket
Knife Terminals
Lamp Body
Lamp Lenses, Red, Green and Amber
Landing Light Lens

Light Housings
Light Test Switch
Main Switch
Microswitch Actuator Arm
Microswitches
Miniature Lamps
Neoprene Hose
NicoPress Sleeves
90° Aeroquip Fitting
90° Bulkhead Elbows
90° Elbows
Nipples
Nose Gear Door Actuator Springs
Nose Gear Door Wear Pad
Nut Couplings
Nutclips
Nylon Cable Ties
Nylon Loop Clamps
Nylon Spiral Wrap
Oilite Bushings
Piano Hinge
Pipe Bushing
Plugs
Pressure Switches
Pulleys
Ring Terminals
Rod End Bearings
Rod End Clevis
Rod End Inserts
Roll Pins
Seat Belts
Shur-Lok Fasteners
Sleeves
Snap Rings
Split Grommets
Stainless Steel Hose Clamps
Stainless Steel Quick-Release Pins
Stainless Steel Springs
Steel Bushings
Tee
Unions
Windshield
Wing Attach Point Covers
Wire Mesh Screen
Wire, 10 Gauge, Single Conductor
Wire, 18 Gauge, Single Conductor
Wire, 20 Gauge, Single Conductor
Wire, 20 Gauge, Three Conductor
Wire, 20 Gauge, Two Conductor

Worm Gear

More than 2,300 additional fasteners and hardware items not listed.

GLASAIR SUPER II FT — SYSTEM 4 KIT #1

This kit contains the horizontal stabilizer, elevators and main wheel pants, as well as the complete set of instruction manuals and templates.

Fiberglass Parts

Elevator Panels, Upr & Lwr
Elevator Root Ribs
Elevator Shearweb
Horizontal Stabilizer 'B' Ribs
Horizontal Stabilizer 'C' Ribs
Horizontal Stabilizer 'D' Ribs
Horizontal Stabilizer Panels, Upr & Lwr
Horizontal Stabilizer Shearweb
Horizontal Tips
Main Wheel Pant Cover Plates, L & R
Main Wheel Pant Halves, Inbrd & Outbrd, L & R

Metal Parts

Elevator Torque Tubes
Elevator Actuator Arm
Elevator Counterweight Arm
Hinge Jig Angles
Elevator Hinge Brackets
Horizontal Stabilizer Hinge Brackets

Miscellaneous Parts and Hardware

Horizontal Stabilizer Hinge Bracket Bushings

More than 250 additional fasteners and hardware items not listed.

GLASAIR SUPER II FT — SYSTEM 4 KIT #2

This kit includes the wing, ailerons and flaps, aileron and flap control systems, wingtips, wing fuel system, and main landing gear.

Fiberglass Parts

Aileron Panels, Upr & Lwr, L & R
Flap Panels, Upr & Lwr, L & R
Lower Wing Panel and Spar Assembly
Main Gear Struts, L & R
Seat Pans, L & R
Upper Wing Panels, L & R
Wingtips, Upr & Lwr, L & R

Metal Parts

Aileron Actuator Fittings
Aileron Actuator Linkage
Aileron Bellcrank Halves, Upr & Lwr
Aileron Counterweights, L & R
Axle Back-Up Rings
Axles
Beaded Vent Valve Tubes
Control Stick Sleeve
Control Stick Swivel Tubes
Control Stick Yokes
Control Sticks
Flap Actuator Linkage
Flap Hinges
Flapper Valves
Fuel Cap Assemblies
Fuel Gauge Housing
Fuel Gauge Mounting Plate
Fuel Pickup Tube
Fuel Vent Float Valve Plugs
Fuel Vent Float Valve Sub-Plates
Fuel Vent Float Valves
Inboard Main Gear Strut Attach Brackets
Inspection Cover Plates
Main Gear Strut Attach Brackets, Upr & Lwr
Main Spar Attach Fittings
Main Wheels and Brakes
Rib Attach Brackets, Inbrd & Outbrd

Spiral-Action Fuel Gauge
Wing Tie-Down Plates, L & R

Miscellaneous Parts and Hardware

Axle Nuts
Bellcrank Bearings
Control Stick Yoke Bushings
Eyebolts
Fuel Drain Valve
Fuel Gauge Gasket
Fuel Screen
Main Wheel Tires, 5.00 x 5, 6-ply
Main Wheel Tubes, 5.00 x 5
Nipple
Nut Couplings
Nylon Loop Clamps
'O' Rings
Piano Hinge
Rod End Bearings
Rod End Inserts
Sleeves
Stainless Steel Hose Clamps
Steel Bushings
Tees
Teflon Bushings
Threaded Drain Insert
Unions
Wingtip Nav Light Lenses, Red and Green

More than 1,000 additional fasteners and hardware items not listed.

GLASAIR SUPER II FT — SYSTEM 4 KIT #3

This kit includes the fuselage, firewall, windshield and canopies, engine mount, rudder controls, nose gear, instrument panel, and header tank.

Fiberglass Parts

Belly Panel
Belly Sections, Fwd & Aft
Canopy Frames, L & R
Canopy Latch Covers, L & R
Cowl Scoop

Cowling Halves, Upr & Lwr
Dorsal Fin
Fuselage Halves, L & R
Header Tank Sump
Wing Root Fairings, Upr & Lwr, L & R

Metal Parts

Canopy Hinge Inserts
Canopy Hinges, Fwd & Aft, L & R
Canopy Latch Actuator Bars, Fwd & Aft
Canopy Latch Extension Handles, L & R
Canopy Latch Handle Housings, L & R
Canopy Latch Internal Handle Assemblies, L & R
Canopy Latch Internal Return Spring Assemblies
Canopy Latch Internal Spring Brackets
Canopy Latch Internal Spring Clevises
Canopy Latch Pivot Housings
Canopy Locking Pin Inserts, Fwd & Aft
Canopy Locking Pins
Engine Mount
Fuel Cap Assembly
Master Cylinders
Nose Gear Axle
Nose Gear Axle Plug
Nose Gear Shock Truss Assembly
Nose Gear Stop Screw Spacer
Nose Gear Strut
Nose Gear Trunnion Attach Plate
Nose Gear Washer
Nose Gear Wear Pad
Nose Gear Wear Pad Plate
Nose Wheel
Nose Wheel Axle Bushing
Nose Wheel Axle Hub

Miscellaneous Parts and Hardware

Aluminum Spacers
Brake Fittings
Cable Eyes
Canopies, L & R

Canopy Latch Knob
Canopy Seal
Canopy Springs
Clevis Pins
Eyebolt
Fuel Drain Valve
Fuel Screen
Gas Spring Ball Studs
Gas Spring Safety Clips
Gas Springs
NicoPress Sleeves
90° Elbows
Nipple
Nose Gear Shock Mount
Nose Wheel Tire, 11.4 x 5, 8-Ply
Nose Wheel Tube, 11.4 x 5
Nut Couplings
Nylon Loop Clamps
Quarter Windows, L & R
Roll Pins
Rubber Hose
Sight Gauge Fitting
Sleeves
Snap Rings
Stainless Steel Hose Clamps
Stainless Steel Pins
Stainless Steel Quick-Release Pins
Steel Bushings
Tee
Threaded Drain Insert
Threaded Screen Insert
Valve Extension
Windshield

More than 1,100 additional fasteners and hardware items not listed.

GLASAIR SUPER II FT — SYSTEM 4 KIT #4

The final kit includes the rudder, cowling, nose gear fairings, exhaust system, seat belts, elevator control and trim systems, fuselage fuel system, and other final assembly items.

Fiberglass Parts

Cabin Air NACA Scoops

Cabin Air Vent Boxes
Center Console
Fuel Boost Pump Bracket
Nose Gear Strut Fairing Halves, L & R
Nose Wheel Pant Halves, L & R
Oil Access Door
Rudder Halves, L & R
Rudder Shearweb Extension

Metal Parts

Elevator Trim Housing
Elevator Clevis
Elevator Trim Attach Plate
Elevator Trim Gear Box and Drum Assembly
Elevator Trim Wheel
Elevator Trim Wheel Shaft
Fuel Selector Shaft
Rudder Actuator Fitting
Rudder Actuator Linkage
Rudder Bellcrank Halves, Upr & Lwr
Rudder Bellcrank Spacer
Towbar Attach Bracket Assembly

Miscellaneous Parts and Hardware

Aeroduct Hose
Aeroquip Hose
Aluminum Spacers
Bellcrank Bearings
Cable Eyes
Cable Shackles
Dzus Fasteners
Elevator Trim Position Indicator Placard
Elevator Trim Springs
Fire Sleeve
45° Elbows
Fuel Drain Valve
Fuel Filter
Fuel Filter Seal
Hose Ends
Landing Light Lens
Neoprene Hose
NicoPress Sleeves
90° Elbows
Nipples

Nut Couplings
Nylon Cable Ties
Nylon Loop Clamps
Nylon Spiral Wrap
Piano Hinge
Pipe Bushing
Pulleys
Rod End Bearings
Rod End Inserts
Roll Pins
Rudder Control Springs

Seat Belts
Sleeves
Steel Bushing
Shur-Lok Fasteners
Snap Rings
Steel Bushings
Three-Way Fuel Selector Valve
Unions
Wing Attach Point Covers
Worm Gear

*More than 1,300 additional
fasteners and hardware items
not listed.*
